

FEMP M&V Team

01/15/10

Goals

All FEMP team members are expected to be familiar with and support M&V issues and protocols, however not all of us need to become specialists. The goals for a core M&V team include:

1. Project support (in some cases a second set of eyes as well a back-up in dealing with clients and ESCOs on M&V issues).
2. Assure that measurement and verification is being introduced early in the project and is adequately addressed throughout the project.
3. Establish a national network of specialists to provide leadership, develop guides and other tools, and improve consistency.

The Team

The following people will form the initial M&V team:

Dale Sartor (LBNL) – team lead
Satish Kumar (LBNL)
Bill Sandusky (or other rep. from PNNL)
Mark Halverson (PNNL)
Jeff Dominic (NREL)
Phil Voss (NREL)
Steve Dunnivant (NREL sub)
Terry Sharp (ORNL)
Michaela Martin (ORNL)
David Jump (or other rep. from Schiller's Oakland office – LBNL sub)
Mark Stetz (or other rep. from Schiller's Boulder office – NREL sub)

Camelia Ilarslan will assist the M&V Team in coordinating the activities.

Flexibility

The M&V project support and quality assurance aspects will be implemented on a flexible and regional basis. If M&V is discussed early in the project, and the submittals including M&V plans and pre-installation baseline reports are of high quality, there should be little time and cost associated with this activity. It is the entire team's responsibility to assure that this is the case. All ongoing projects should have an M&V POC assigned, that POC should have a basic understanding of the project, the allocation of risks, the M&V protocol to be

used, and their own role in the project. This process can be flexible and quick. It should not unnecessarily increase cost or delay projects.

Expectations

Project oriented expectations - The M&V point of contact (POC), drawn from the above list, is to provide M&V support and review to ensure that M&V is covered adequately on each ESPC project. In some cases the POC may also be a second set of eyes supporting the PF. The POC should ensure that M&V is introduced early in the project, and addressed appropriately throughout. To accomplish this we must assure the following:

1. An accurate list of projects is maintained for each region.
2. All existing projects have an M&V POC assigned, and new projects are assigned when a preliminary proposal has been received or is expected. Assignments are done in consultation with the COR, regional technical team leads, and the project facilitators. Ideally the M&V POC is a regional resource. PF's that are also on the M&V team can serve both duties especially on simple projects.
3. PFs brief the M&V POCs and provide appropriate documentation. As a minimum this would include the risk matrix, M&V plans, M&V check list, and related documentation.
4. POC should have a basic understanding of the project, know the allocation of risks, the M&V protocols to be used, and their own role in the project. The technical team leads, project facilitators, COR, and M&V POC should discuss each project and define the appropriate role for the M&V POC. This discussion should be documented (e.g. in an e-mail or project report). As a minimum the POC should review or be briefed on all submittals impacting M&V.
5. The M&V POCs archive key submittals relating to M&V (e.g. risk matrix and M&V plan). Review comments should be documented.

Program oriented expectations - The M&V team is expected to fully participate in a national network. Each M&V team member is expected to be familiar with FEMP M&V resources and actively participate in their improvement. Team members will be the regional link to this broader resource base (the national network). At the present time, representatives from Schiller Associates play two roles. First they are available through the labs (currently LBNL and NREL) to provide direct project support, and second, they provide staff support to the national team and are tasked to develop several of the M&V "products." All requests to Schiller for non-project specific support (e.g. check lists, guides, training, etc.) should go through the national team and will be tasked by LBNL. The national team is expected to:

1. Develop guidelines and tools
2. Improve consistency
3. Provide leadership on M&V